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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,486	11/10/2003	David Punsalan	200312536-1	5126
22879 7590 01/09/2007 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			EXAMINER WILKINS III, HARRY D	
			ART UNIT	PAPER NUMBER
			1742	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/09/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/705,486

Applicant(s)

PUNSALAN ET AL.

Examiner

Harry D. Wilkins, III

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) 19-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 18 and 53 is/are rejected.
- 7) ☒ Claim(s) 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/10/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of group I, claims 1-18 (and now 53) in the reply filed on 21 October 2006 is acknowledged.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Cressman et al (US 3,879,275).

Cressman et al anticipate the invention as claimed. Cressman et al teach (see abstract, drawings and cols. 1-2) a method including the steps of 1) removably coupling a perimeter support (gasket, 4) to a temporary substrate (2) and 2) electrodepositing a polymeric material film (7) on to the temporary substrate.

With respect to the recitation in the claim of "forming an electrolyte", this limitation relates to the intended use of the claimed method and is not given significant patentable weight.

Additionally, it is noted that although Applicant's disclosure describes the formed membrane becoming attached during formation to the perimeter support, this feature is not required by the claims. Further, nothing in claim 1 requires that the formed film be detachable from the "temporary substrate".

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Regarding claim 5, the perimeter support of Cressman et al was a gasket.

Regarding claim 6, the temporary substrate of Cressman et al was an electrode.

Regarding claim 7, Cressman et al teach (see figure 1) that the temporary electrode was the negatively charged electrode.

4. Claims 1, 5-10, 13, 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Honda et al (US 5,281,327).

Honda et al anticipate the invention as claimed. Honda et al teach (see abstract, drawings and cols. 1-2) a method including the steps of 1) removably coupling a perimeter support (2, 2') to a temporary substrate (3) and 2) electrodepositing a polymeric material film (6) on to the temporary substrate.

With respect to the recitation in the claim of "forming an electrolyte", this limitation relates to the intended use of the claimed method and is not given significant patentable weight.

Additionally, it is noted that although Applicant's disclosure describes the formed membrane becoming attached during formation to the perimeter support, this feature is not required by the claims.

Regarding claim 5, the perimeter support of Honda et al was a gasket.

Regarding claim 6, the temporary substrate of Honda et al was an electrode.

Regarding claim 7, Honda et al teach (see figure 1) that the temporary electrode was the negatively charged electrode.

Regarding claims 8-10, Honda et al teach (see col. 5, lines 37-47) using metallic material as the temporary substrate, particularly stainless steel.

Regarding claims 13, 15 and 16, Honda et al teach (see col. 2, line 48 to col. 3, line 3) that two distinct layers were formed in the process. Since both layers formed by electrodeposition, the second layer (7) would have been formed by electrodeposition of ions.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honda et al (US 5,281,327).

Although Honda et al are silent with respect to using a release material, since the film was to be separated from the temporary substrate, it would have been obvious to one of ordinary skill in the art to have provided a material that made the separation easier.

7. Claims 2-4, 12, 14, 18 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honda et al (US 5,281,327) in view of Murphy et al (US 6,059,943).

The teachings of Honda et al are described above.

Honda fails to teach depositing a combination of structural material (ceramic particles) and polymeric (electrolyte) material (including perfluorosulphonic acid, col. 8, lines 62-64) such that the electrodeposition included electrophoretic deposition.

Murphy et al teach (see abstract, figure 12 and col. 8, lines 35-44) composite polymer-metal oxide membranes that are quite suitable for use as membranes for fuel cells.

Therefore, it would have been obvious to one of ordinary skill in the art to have utilized the method of making a polymeric film of Honda et al to make the polymeric-metal oxide composite membrane of Murphy et al because the process of Honda et al was capable of easily forming coherent polymer films.

The deposition of the metal oxide particles would have occurred by an electrophoretic mechanism.

Allowable Subject Matter

8. Claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not teach or suggest formation of a polymeric film with use of a perimeter support (gasket) wherein the film becomes attached to the support such that both are removed from a temporary substrate as an integral unit.

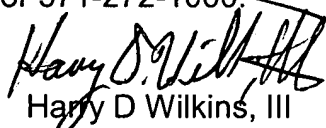
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harry D. Wilkins, III whose telephone number is 571-272-1251. The examiner can normally be reached on M-F 8:30am-5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy V. King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Harry D Wilkins, III
Primary Examiner
Art Unit 1742

hdw